INVASIVE SPECIES CONTROL PROJECTS (R1 SMALL GRANTS)
FY 2013 FINAL REPORT

Project Title: Highway 24 Homestead Reclamation

Station: Hanford Reach National Monument

Contact Person: Kevin Goldie

Project Description: The Homestead project is a multi-year site reclamation effort designed to address a habitat degradation and hazardous fuel issue primarily caused by leaching irrigation water. Past efforts have focused on removal of the hazardous fuels, treatment of invasive species, and introduction of early sere native grasses. The FY2013 project as described was to finish the removal of the hazardous fuels, continue treatment of the invasive weeds and to continue establishment of native species (including later sere grasses, forbs and shrubs).

Invasive Species Targeted: Kochia (*Bassia scoparia*; Class B noxious weed in WA), Smotherweed (*Bassia hyssopifolia*), Tumblemustard (*Sisymbrium altissimum*), Russian thistle (*Salsola tragus, S. kali*)

Project Completion Date or Estimated Completion Date:
Project phase covered under FY13 Small Grant: early January 2014
Estimated overall project completion date: winter 2015/2016

Project Results: The western 1/3 of the project area (that area left over from 2012) was burned in June 2013 by USFWS fire crews and cooperators. It was a clean burn and they were able to get everything they had intended to except for a small wedge (< 8 acres) on the southeast corner when environmental conditions shifted out of burn-prescription. This did not negatively impact the overall project as this wedge was not heavily infested with invasive broadleaves and did not have enough detritus to interfere with the drill seeder. The eastern 2/3 of the area was treated in June/July with a tank mix of fluroxypyr (Vista XRT®), 2,4-D amine (Platoon®) and MSO using a tractor-mounted boomless sprayer. The western 1/3 of the area was treated with a tank mix of glyphosate and 2,4-D amine, to generally control growth ahead of drill seed operations in winter 2013/2014.

Staffing reductions in part related to sequestration forced the first chemical application to take longer than originally designed; as such some of the kochia (< 12 acres worth) was larger than prescription when treated and may have produced some seed of unknown viability. This delay also led to some production of excessive biomass which had to be mowed off before additional native seed could be applied. The mowing was accomplished in early December 2013.

As originally proposed this year's seed mix was to be forb-focused. The reduction in the grant amount, coupled with the possible production of viable kochia seed, necessitated a change in the native seed mix. Further, a dry spring led to limited germination of last year's application of early-sere native grass seed. While we did have good germination, we felt it wasn't what was necessary to adequately compete against invasive broadleaves. We decided to alter the seed mix to include additional seed of early-sere grass species, several mid-sere grass species, and robust

and resistant forb and shrub species. This mix will also allow for an additional broadleaf chemical control treatment should it become necessary in 2014 (i.e., without wiping out newly seeded native forbs). The ground on the project site has been frozen fairly solid since December 2 so this native seed mix will be applied in late December 2013 and early January 2014, after the soils have sufficiently thawed.

Number of Acres Treated: ~150 acres

Number of Acres Inventoried and/or Mapped: ~150 acres

Number of Acres Restored: <in progress>

Total Grant Amount: $30,000 (representing special sequestration-induced pricing)

Breakdown of Expenditures: (totals approximate)

Category	**Total $ Spent**	**% of Total Grant**
Equipment/Supplies	---	---
Chemical	$9,200	30.7%
Biocontrol Agents	---	---
Travel	---	---
Biotech/Contractor/Salary	$3,270	10.9%
Restoration Materials	$17,530	58.4%
Other (Describe)	---	---
TOTAL	$30,000	100%